What is claim d is:

1.   A radio access network system for transferring a packet in a network including a base station and a control apparatus, which comprises:

5   a transfer path setter configured to set a transfer path for the packet in the network;

a priority information setter configured to set priority information for determining a priority of the packet to be transferred at the base station and the control apparatus which

10   are included in the transfer path; and

a packet processor configured to determine the priority of the received packet in accordance with the priority information, and to add the priority to the received packet.

15 2.   A radio access method for transferring a packet in a network including a base station and a control apparatus, the method comprising the steps of:

setting a transfer path for the packet in the network;

setting priority information for determining a priority

20   of the packet to be transferred at the base station and the control apparatus which are included in the transfer path; and

determining the priority of the received packet in accordance with the priority information, and adding the priority to the received packet, in the base station and the

25   control apparatus.

3.   A control apparatus for transferring a packet in a network, which comprises:

a priority information setter configured to set priority

information for determining a priority of the packet to be transferred in a transfer path set in the network; and

a packet processor configured to determine the priority of the received packet in accordance with the priority
5   information, and to add the priority to the received packet.

4.   The control apparatus according to claim 3, wherein the priority information setter sets the priority information in accordance with whether the packet to be transferred belongs
10   to a traffic class requiring real-time communication or not.

5.   The control apparatus according to claim 3 further comprising a field information notifier configured to notify field information showing a format of a predetermined field in
15   the packet; and wherein the packet processor adds the priority to the predetermined field in the received packet in accordance with the notified field information.

6.   The control apparatus according to claim 5, wherein the
20   packet processor adds the priority to the predetermined field of a common format in the whole network or a predetermined network domain, in accordance with the notified field information.

25   7.   The control apparatus according to claim 6, wherein the priority information setter sets the priority information in accordance with a flag showing which one of the packet delay characteristics, throughput, reliability or cost takes top priority, the flag being defined in the predetermined field.

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